

REMARKS/ARGUMENTS

Claims 17, 19-24, 26-31 and 33-37 have been examined and finally rejected. Claims 1-16, 18, 25, and 32 have previously been cancelled. The present response amends claims 17, 20-21, 24, 27, 31, and 34-35 and cancels claims 19, 26, 33. Accordingly, claims 17, 20-24, 27-31, and 34-37 remain pending. Entry of the present amendment after final, reconsideration, and allowance of all pending claims are respectfully requested.

Claims 17, 19-24, 26-31 and 33-37 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,130,875 issued to Doshi, et al. (hereinafter "Doshi") in view of U.S. Patent No. 4,967,345 issued to Clarke, et al. (hereinafter "Clarke"). Independent claims 17, 24, and 31 have been amended to incorporate the limitations of dependent claims 19, 26, and 33, respectively, and also to add certain further clarifying language. It is respectfully submitted that the claims, as pending, recite limitations neither disclosed nor suggested by the art of record.

Speaking at a general level, the claimed invention is directed towards systems and methods for finding "protectable paths" through a network. Part of the technique for finding such protectable paths is a way of selecting from one of an identified plurality of shortest paths having equal costs from a first node to a second node. For example, claims 17 recites "selecting one of said plurality of shortest paths that has an edge disjoint alternate path and is thus protectable." To make this selection, a "parent node" for each of the shortest paths is examined. The parent node is the last node before the second node on any particular path. The shortest path that is selected is one for which the parent node has not been marked. This indicates that there is not a plurality of equal cost shortest paths to the parent node from the first node.

The Doshi patent generally relates to finding restoration paths having adequate bandwidth to protect primary paths. There is detailed disclosure concerning meeting bandwidth requirements for many such restoration paths in a given network. The Clarke patent generally describes techniques for picking among a plurality of shortest paths to encourage equal utilization of network resources. Each previous node to a destination node is assigned a

probability weight based on a number of shortest paths to the destination extending through that previous node. Path selection among shortest paths is based on the probability weights.

A *prima facie* argument for obviousness under 35 U.S.C. § 103 requires that the cited references together disclose or suggest all of the limitations of the rejected claim. Furthermore, there must be some suggestion to combine the references. Neither criterion is met here and the rejection should be withdrawn.

Independent claims 17, 24, and 31 all require selection of a protectable path from among a plurality of shortest paths and further recite details of how this is accomplished by the parent node examination process referred to above. Neither the Doshi nor the Clarke patent disclose or suggest this feature. This deficiency of the cited art is sufficient reason for the allowability of the independent claims.

The Examiner points to column 11, lines 18-20 of Doshi as disclosing the identification of a plurality of shortest paths having equal costs from a first node to a second node. Text in column 10 is then cited as disclosing selection of one of the plurality of shortest paths that is an edge disjoint alternate path and thus protectable. Review of the cited text of Doshi, however, shows that, in strong contrast to the claimed invention, what is being discussed therein is the identification of restoration paths. There is no disclosure or suggestion of steps taken to assure that a selected shortest path will in fact be protectable and to efficiently compute protectable paths. Doshi does not address the routing of the primary paths but rather begins with the primary paths already being computed and needing restoration paths as protection. Nothing in Doshi would teach one how to route the primary path such that it will in fact be protectable.

This deficiency of Doshi is not addressed by Clarke. Clarke does not deal with protection issues at all but rather a technique for picking among equal cost paths for a different reason, a desire to equalize usage of available network resources.

Furthermore, it is inappropriate to combine these two references. There is no suggestion to combine them. In fact, there is no sensible application of the Clarke disclosure to the system described in Doshi. The disclosure of Doshi is largely focused on managing bandwidth requirements for restoration paths. Identifying the routing of the restoration paths is mentioned in passing as being accomplished by use of a distributed "breadth-first search (BFS) technique." See column 12, lines 8-11. Given the peripherality of the path computation technique in Doshi, it is not clear to what the shortest path selection techniques of Clarke would be applied. The Clarke teachings do not pertain to the restoration bandwidth allocation issues discussed in Doshi. The disclosures of the two patents do not fit together to create an operative combination and this is sufficient basis to defeat any contention that it would be obvious to combine them.

Independent claims 17, 24, and 31 are therefore allowable over the art of record. Claims 20-23, 27-30, and 34-37 are allowable for at least the reason of their dependence from the allowable parent claims.

Conclusion

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 446-8694.

Respectfully submitted,



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